

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims, in the application.

Listing of Claims

Claim 1 (currently amended): A biosensor having

- (a) an electrode support;
- (b) an arrangement of electrodes disposed on the electrode support, the arrangement of electrodes comprising at least a working electrode and at least a second electrode;
- (c) a first conductive track leading from the working electrode to an electrical contact associated with the working electrode and a second conductive track leading from the second electrode to an electrical contact associated with the at least second electrode; and
- (d) at least one reagent enzyme or substrate for an enzyme, or at least one mediator incorporated in at least one of the first conductive track leading from the working electrode to the electrical contact associated with the working electrode, or the electrical contact associated with the working electrode, ~~the at least one reagent comprising at least one enzyme and at least one mediator, the at least one enzyme being reactive with the at least one mediator.~~

Claim 2 (canceled)

Claim 3 (previously presented): The biosensor of claim 1, wherein the at least one mediator is selected from the group consisting of organometallic compounds, organic compounds, and coordination compounds with inorganic or organic ligands.

Claim 4 (previously presented): The biosensor of claim 1, wherein the at least one enzyme is selected from the group consisting of oxidases and dehydrogenases.

Claim 5 (currently amended): The biosensor of claim 1, further including at least one ~~reagent-containing layer~~ comprising (i) at least one enzyme or substrate for an enzyme and (ii) at least one mediator overlying the ~~conductive track leading from~~ the working electrode.

Claim 6 (original): The biosensor of claim 1, the biosensor requiring a low volume of sample to trigger an electrochemical reaction.

Claim 7 (original): The biosensor of claim 1, wherein spacing between the working electrode and the at least second electrode does not exceed about 200 micrometers.

Claim 8 (original): The biosensor of claim 1, wherein the working electrode has an area of from about 0.5 mm² to about 5 mm².

Claim 9 (original): The biosensor of claim 1, wherein the electrode arrangement further comprises a trigger electrode.

Claim 10 (original): The biosensor of claim 1, wherein the electrode arrangement further comprises a third electrode.

Claim 11 (original): The biosensor of claim 10, wherein the electrode arrangement further comprises a fourth electrode, said fourth electrode having the function of a trigger electrode.

Claim 12 (original): The biosensor of claim 1, further comprising an insulating layer overlying said electrode arrangement and said conductive tracks.

Claim 13 (original): The biosensor of claim 12, wherein a layer of mesh is interposed between the electrode arrangement and the insulating layer.

Claim 14 (original): The biosensor of claim 12, wherein a capillary is interposed between the electrode arrangement and the insulating layer.

Claim 15 (original): The biosensor of claim 1, further comprising a layer of tape overlying said electrode arrangement and said conductive tracks.

Claim 16 (currently amended): A biosensor having

- (a) a first substrate having two major surfaces;
- (b) a second substrate having two major surfaces;
- (c) a working electrode disposed on one major surface of the first substrate;
- (d) at least a second electrode disposed on one major surface of the second substrate;
- (e) a first conductive track leading from the working electrode to an electrical contact associated with the working electrode and a second conductive track leading from the second electrode to an electrical contact associated with the at least second electrode;
- (f) at least one reagent enzyme or substrate for an enzyme, or at least one mediator incorporated in at least one of the first conductive track leading from the working electrode to the electrical contact associated with the working electrode, or the electrical contact associated with the working electrode, ~~the at least one reagent comprising at least one enzyme and at least one mediator, the at least one enzyme being reactive with the at least one mediator;~~

(g) an insulating layer disposed between said working electrode and said at least second electrode;

(h) the major surface bearing the working electrode facing the major surface bearing the at least second electrode.

Claim 17 (canceled)

Claim 18 (previously presented): The biosensor of claim 16, wherein the at least one mediator is selected from the group consisting of organometallic compounds, organic compounds, and coordination compounds with inorganic or organic ligands.

Claim 19 (previously presented): The biosensor of claim 16, wherein the at least one enzyme is selected from the group consisting of oxidases and dehydrogenases.

Claim 20 (currently amended): The biosensor of claim 16, further including at least one ~~reagent-containing layer~~ comprising (i) at least one enzyme or substrate for an enzyme and (ii) at least one mediator overlying the ~~conductive track leading from the working electrode~~.

Claim 21 (original): The biosensor of claim 16, the biosensor requiring a low volume of sample to trigger an electrochemical reaction.

Claim 22 (original): The biosensor of claim 16, wherein spacing between the working electrode and the at least one other electrode does not exceed about 200 micrometers.

Claim 23 (original): The biosensor of claim 16, wherein the working electrode has an area of from about 0.5 mm² to about 5 mm².

Claim 24 (original): The biosensor of claim 16, wherein the electrode arrangement further comprises a trigger electrode.

Claim 25 (original): The biosensor of claim 16, wherein the electrode arrangement further comprises a third electrode.

Claim 26 (original): The biosensor of claim 25, wherein the electrode arrangement further comprises a fourth electrode, said fourth electrode having the function of a trigger electrode.

Claim 27 (original): The biosensor of claim 16, wherein a layer of mesh is interposed between the working electrode and the insulating layer.

Claim 28 (original): The biosensor of claim 16, wherein a capillary is interposed between the working electrode and the insulating layer.